

Claim <sup>9</sup>~~10~~ (Three Times Amended). A recombinant retroviral vector useful to nonselectively [transfect target] transduce cells, said vector comprising:

- G<sup>2</sup>
- (a) a 5' LTR derived from a retrovirus of interest;
  - (b) a Psi packaging site located 3' to said 5' LTR;
  - (c) a consensus splice acceptor site located 3' to said Psi packaging site;
  - (d) an alpha globin transcriptional promoter located 3' to said Psi packaging site;
  - (e) an insertion site for a gene of interest located 3' to said alpha globin transcriptional promoter;
  - (f) a 3' LTR derived from a retrovirus of interest located 3' to said insertion site; and

wherein said vector does not contain a complete selectable marker gene used for the transduction of said cells, or a complete *gag*, *env*, or *pol* gene between said 5' and 3' LTRs.

Claim <sup>20</sup>~~21~~ (Three Times Amended). A recombinant retroviral vector useful to nonselectively [transfect target] transduce cells, comprising, a 5' LTR derived from a murine leukemia virus, a consensus splice acceptor site and an insertion site for a gene of interest located between said 5' and 3' LTRs, wherein said vector does not contain a complete selectable marker gene used for the transduction of said cells, or a complete *gag*, *env*, or *pol* gene.

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Claim <sup>31</sup>~~35~~ (Amended). A recombinant retroviral particle [which does not encode a complete selectable marker,] produced by a producer cell comprising the recombinant retroviral vector of claim 1 said particle having the property of being capable of transducing mammalian cells.

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Claim ~~36~~ (Amended). A particle according to claim ~~35~~, ~~42~~, or ~~43~~ wherein said transducing occurs *in vitro*.

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Claim ~~37~~ (Amended). A particle according to claim ~~35~~, ~~42~~, or ~~43~~ wherein said transducing occurs *in vivo*.

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Please add the following new claims 42-44.

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Claim ~~42~~ (New). A recombinant retroviral particle produced by a producer cell comprising the recombinant retroviral vector of claim ~~9~~ <sup>10</sup>, said particle having the property of being capable of transducing mammalian cells.

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Claim ~~43~~ (New). A recombinant retroviral particle produced by a producer cell comprising the recombinant retroviral vector of claim ~~11~~ <sup>10</sup>, said particle having the property of being capable of transducing mammalian cells.

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Claim ~~44~~ (New). A recombinant retroviral vector useful to nonselectively transfect cells, comprising:

- (g) a 5' LTR derived from a retrovirus of interest;
- (h) a splice donor site located 3' to said 5' LTR;
- (i) a Psi packaging site located 3' to said splice donor site;
- (j) a consensus splice acceptor site, derived from MOV- 9, located 3' to said Psi packaging site;
- (k) an insertion site for a gene of interest located 3' to said consensus splice acceptor site;
- (l) a 3' LTR derived from a retrovirus of interest located 3' to said insertion site; and

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concl.  
wherein said vector does not contain a complete selectable marker gene used for the transfection of said cells, or a complete *gag*, *env*, or *pol* gene between said 5' and 3' LTR.

### REMARKS

Reconsideration of the present application in view of the above amendments and the following remarks is respectfully requested.

Claims 1-4, 6-31, and 35-41 are pending in this application. Claims 38-41 have been allowed. Claims 1, 10, 21, and 35-37 have been amended, and new claims 42-44 have been added. The specification has also been amended to correct inadvertent typographical errors. Support for the amendment to page 15 can be found at page 9, line 28 - page 10, line 1, Fig. 3, and page 29, line 14 - page 30, line 7.

Claims 1, 10, and 21 have been amended to clarify Applicants' invention. The claims have been amended to recite "transduce" rather than "transfect" to refer to the infection of cells with retroviral vectors for consistency with the specification. Support for the amendments to claims 1, 10, and 21 may be found throughout the specification (*e.g.*, page 4, line 25, to page 5, line 19). Claims 35-37 have been amended and new claims 42-44 have been added to more particularly point out and distinctly claim Applicants' invention. Support for the amendments to claim 35-37 and for new claims 42-44 may be found throughout the specification (*e.g.*, from page 17, line 27, to page 18, line 8 and from page 28, line 35, to page 29, line 2).

None of the above amendments introduces new subject matter as support may be found throughout the specification as originally filed.

Each of the rejections set forth in the Office Action dated January 27, 1999 (the "Office Action") are addressed separately below.